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Attorney Docket: 2101/50765  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: COLIN DAVID SILENCE ET AL  
Serial No.: NOT YET ASSIGNED PCT No.: PCT/GB01/00126  
Filed: MARCH 27, 2002  
Title: LIGHTNING PROTECTION APPARATUS AND METHOD

PRELIMINARY AMENDMENT

Box PCT  
Commissioner for Patents  
Washington, D.C. 20231

March 27, 2002

Sir:

Please enter the following amendments to the claims, prior to the examination of the application during the U.S. National Phase.

IN THE CLAIMS:

Please cancel Claims 15 and 16, without prejudice to or disclaimer of the subject matter thereof, and amend the remaining claims as follows: **(A copy of a marked up version with markings to show changes made is attached hereto.)**

5. (Amended) A lightning protection apparatus for a radome as claimed in claim 3, wherein the predetermined threshold level is about 1000 volts per metre.

6. (Amended) A lightning protection apparatus for a radome as claimed in Claim 1, wherein the means for directing the conducting fluid across the outer surface of the radome comprises grooves on the surface of the radome.

7. (Amended) A lightning protection apparatus for a radome as claimed in Claim 1, further comprising means for deactivating the conductive channel when the surrounding atmospheric conditions are no longer indicative of a high probability lightning strike.

9. (Amended) A lightning protection apparatus for a radome as claimed Claim 1, wherein the delivery system comprises two or more dielectric capillary tubes which vent close to the tip of the radome and a pump associated with a reservoir of the conducting fluid.

10. (Amended) A lightning protection apparatus for a radome as claimed in Claim 1, wherein the delivery system comprises a pneumatic or hydraulic system in which all control lines are dielectric and the pneumatic or hydraulic fluid used is not electrically conducting.

11. (Amended) A lightning protection apparatus for a radome as claimed in Claim 1, wherein the delivery means comprises electric pump and valve means powered by a battery and the control means comprises a signalling circuit of optical fibres.

(Applicant's Remarks are set forth hereinbelow, starting on the following page.)

Serial No. NOT YET ASSIGNED

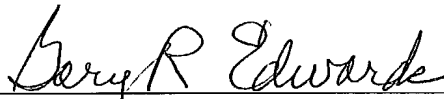
**REMARKS**

Entry of the amendments to the claims, before examination of the application in the U.S. National Phase is respectfully requested.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #2101/50765).

Respectfully submitted,



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(CAM #: 38665.022)

## VERSION WITH MARKINGS TO SHOW CHANGES MADE TO THE CLAIMS

5. (Amended) A lightning protection apparatus for a radome as claimed in claim 3, [or claim 4] wherein the predetermined threshold level is about 1000 volts per metre.

6. (Amended) A lightning protection apparatus for a radome as claimed in [any preceding claim] Claim 1, wherein the means for directing the conducting fluid across the outer surface of the radome comprises grooves on the surface of the radome.

7. (Amended) A lightning protection apparatus for a radome as claimed in [any preceding claim] Claim 1, further comprising means for deactivating the conductive channel when the surrounding atmospheric conditions are no longer indicative of a high probability lightning strike.

9. (Amended) A lightning protection apparatus for a radome as claimed [in any preceding claim] Claim 1, wherein the delivery system comprises two or more dielectric capillary tubes which vent close to the tip of the radome and a pump associated with a reservoir of the conducting fluid.

10. (Amended) A lightning protection apparatus for a radome as claimed in [any preceding claim] Claim 1, wherein the delivery system comprises



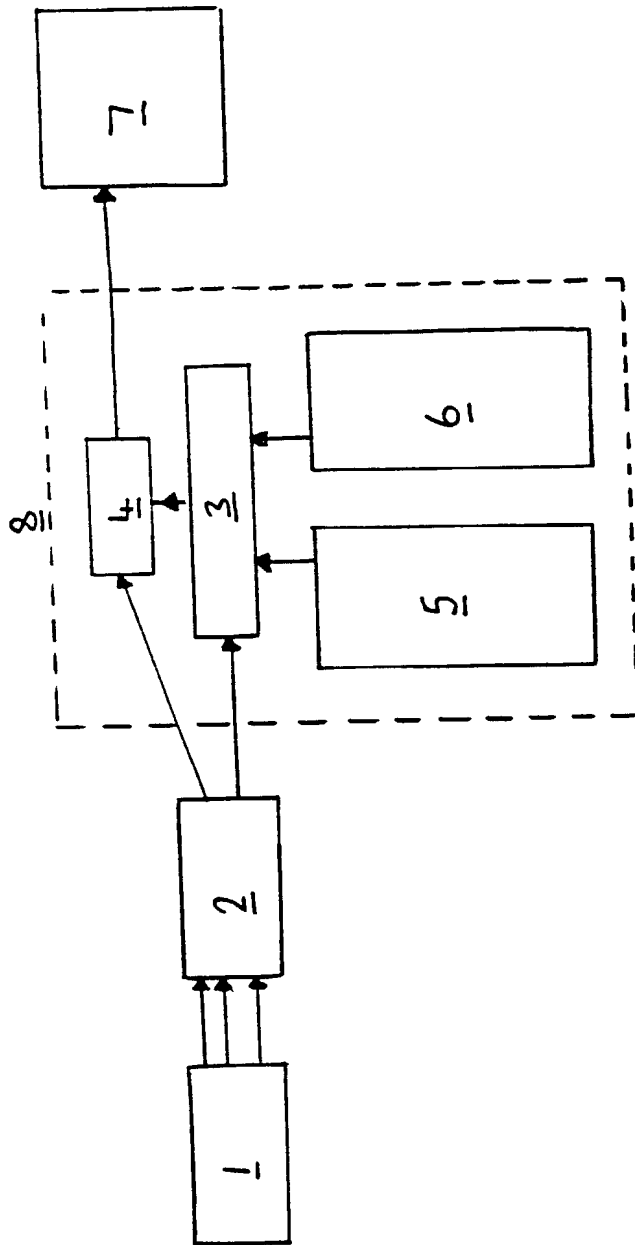
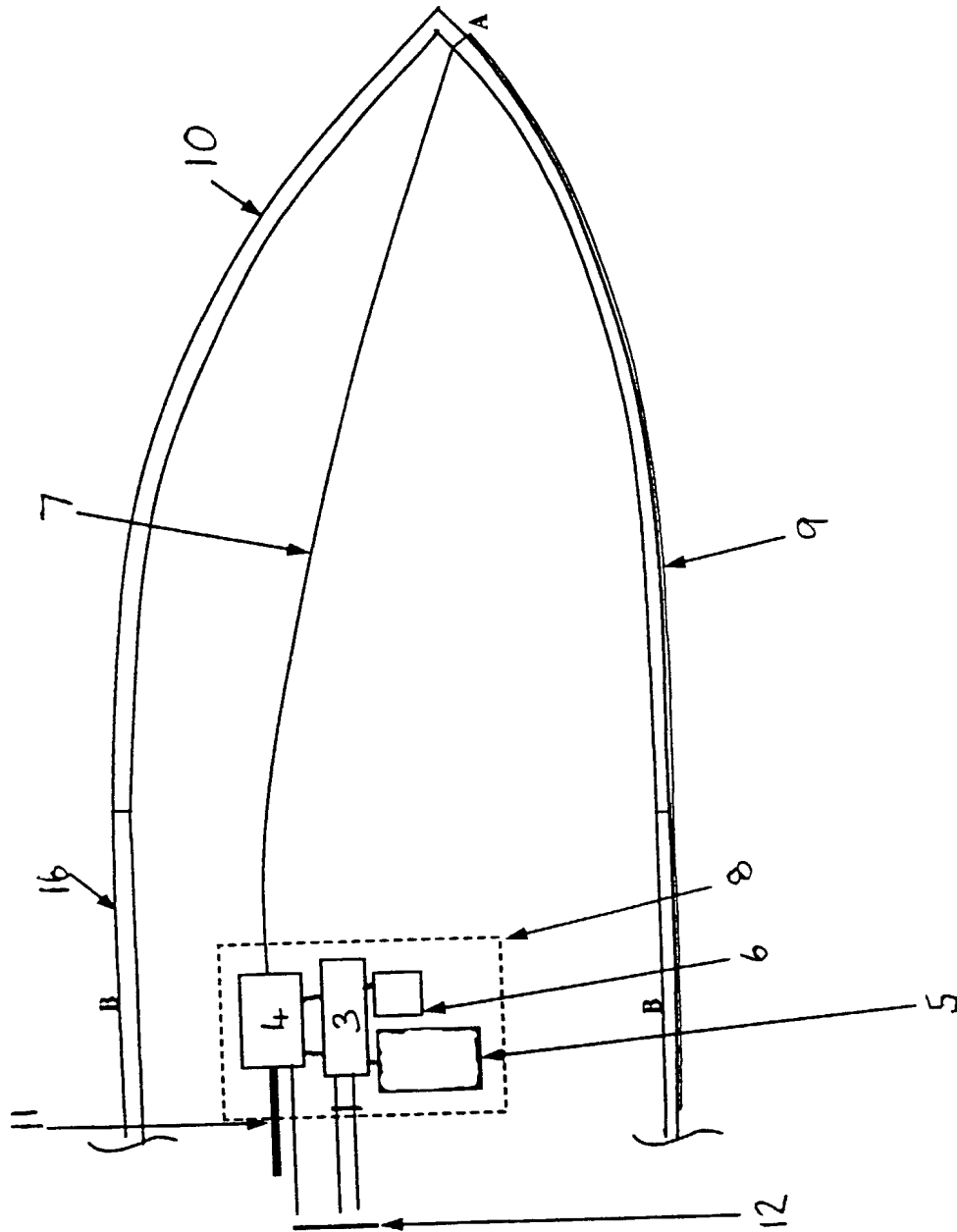


FIG. 1

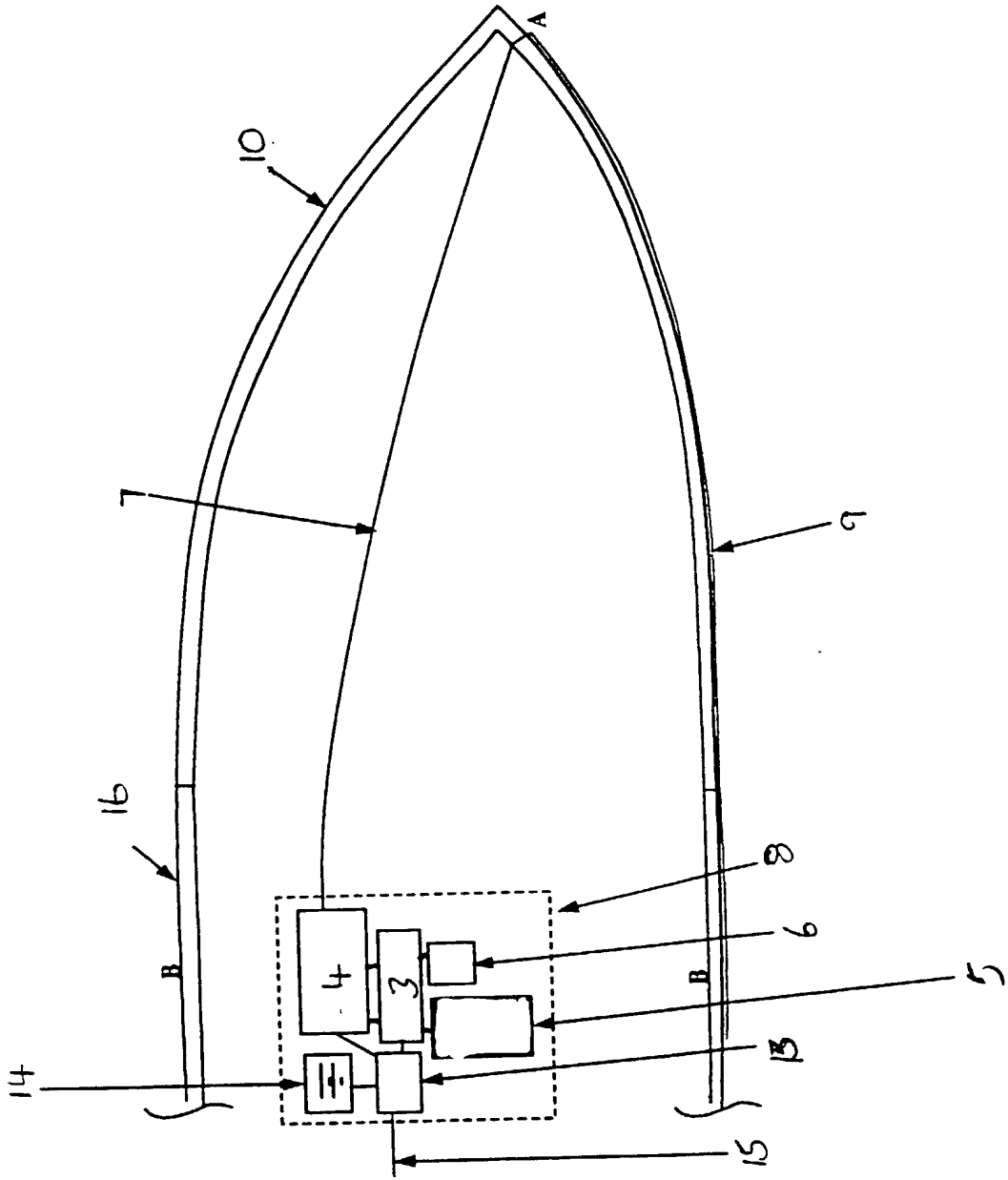
FIGURE 2





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FIGURE 3



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FIGURE 4

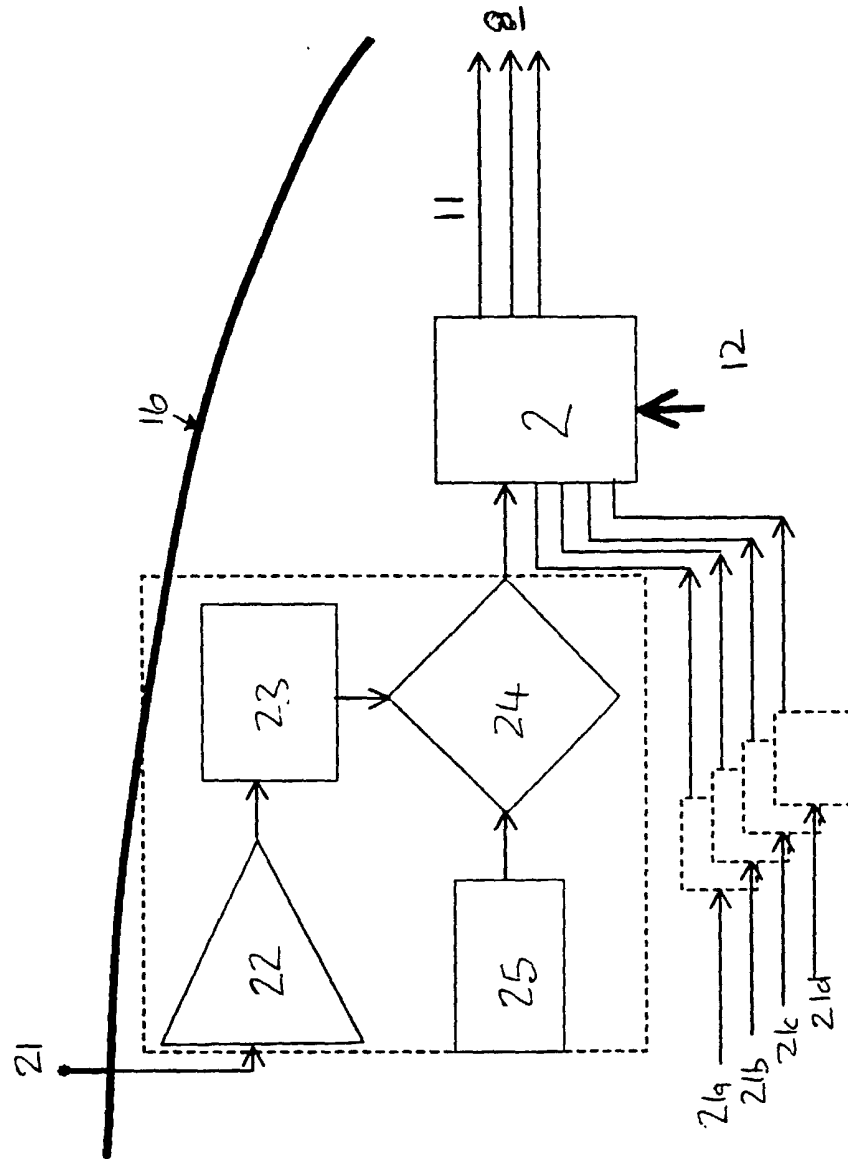


FIGURE 5

